NCES 2007-495CO8

The Nation's Report Card Mathematics 2007

State Snapshot Report

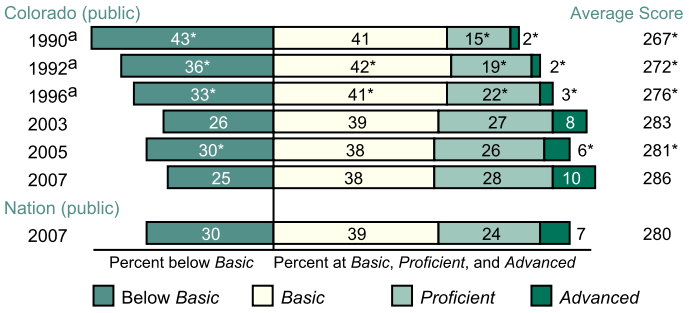
Colorado
Grade 8
Public Schools

The National Assessment of Educational Progress (NAEP) assesses mathematics in five content areas: number properties and operations; measurement; geometry; data analysis and probability; and algebra. The NAEP mathematics scale ranges from 0 to 500.

Overall Mathematics Results for Colorado

- In 2007, the average scale score for eighth-grade students in Colorado was 286. This was higher than their average score in 2005 (281) and was higher than their average score in 1990 (267).[1]
- Colorado's average score (286) in 2007 was higher than that of the nation's public schools (280).
- Of the 52 states and other jurisdictions that participated in the 2007 eighth-grade assessment, students' average scale score in Colorado was higher than those in 25 jurisdictions, not significantly different from those in 21 jurisdictions, and lower than those in 5 jurisdictions.[2]
- The percentage of students in Colorado who performed at or above the NAEP *Proficient* level was 37 percent in 2007. This percentage was greater than that in 2005 (32 percent) and was greater than that in 1990 (17 percent).
- The percentage of students in Colorado who performed at or above the NAEP *Basic* level was 75 percent in 2007. This percentage was greater than that in 2005 (70 percent) and was greater than that in 1990 (57 percent).

Percentages at NAEP Achievement Levels and Average Score



[a] Accommodations were not permitted for this assessment.

NOTE: The NAEP grade 8 mathematics achievement levels correspond to the following scale points: Below *Basic*, 261 or lower; *Basic*, 262–298; *Proficient*, 299–332; *Advanced*, 333 or above.

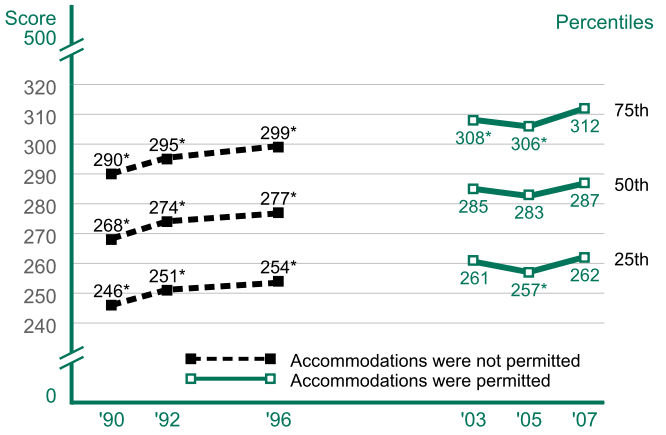
Performance of NAEP Reporting Groups in Colorado: 2007

Reporting groups	Percent of students	Average score	Percent below *Basic*	Percent of students at or above *Basic*	Percent of students at or above *Proficient*	Percent *Advanced*
Male	52	287 ↑	25	75	38	10 ↑
Female	48	286 ↑	25	75	37	9
White	65	296 ↑	15	85	48 ↑	13 ↑
Black	7	272 ↑	40	60	21 ↑	4
Hispanic	25	264	47	53	13	2
Asian/Pacific Islander	3	297	18	82	48	17
American Indian/Alaska Native	1	‡	‡	‡	‡	‡
Eligible for National School Lunch Program	33	267 ↑	42 ↓	58 ↑	17	2
Not eligible for National School Lunch Program	67	296 ↑	16	84	48 ↑	14 ↑

Average Score Gaps Between Selected Groups

- In 2007, male students in Colorado had an average score that was not significantly different from that of female students. In 1990, the average score for male students was higher than that of female students by 4 points.
- In 2007, Black students had an average score that was lower than that of White students by 24 points. This performance gap was narrower than that of 1990 (36 points).
- In 2007, Hispanic students had an average score that was lower than that of White students by 32 points. This performance gap was wider than that of 1990 (27 points).
- In 2007, students who were eligible for free/reduced-price school lunch, a proxy for poverty, had an average score that was lower than that of students who were not eligible for free/reduced-price school lunch by 28 points. This performance gap was wider than that of 1996 (23 points).
- In 2007, the score gap between students at the 75th percentile and students at the 25th percentile was 50 points. This performance gap was wider than that of 1990 (44 points).

Mathematics Scores at Selected Percentiles



NOTE: Scores at selected percentiles on the NAEP mathematics scale indicate how well students at lower, middle, and higher levels performed.

Rounds to zero.
‡ Reporting standards not met.
* Significantly different from 2007.
↑ Significantly higher than 2005. ↓ Significantly lower than 2005.

[1] Comparisons (higher/lower/narrower/wider/not different) are based on statistical tests. The .05 level was used for testing statistical significance. Statistical comparisons are calculated on the basis of unrounded scale scores or percentages. Comparisons across jurisdictions and comparisons with the nation or within a jurisdiction across years may be affected by differences in exclusion rates for students with disabilities (SD) and English language learners (ELL). The exclusion rates for SD and ELL in Colorado were 2 percent and "percentage rounds to zero" in 2007, respectively.For more information on NAEP significance testing see http://nces.ed.gov/nationsreportcard/mathematics/interpret-results.asp#statistical.

[2] "Jurisdictions" refers to states and the District of Columbia and the Department of Defense Education Activity schools.

NOTE: Detail may not sum to totals because of rounding and because the "Information not available" category for the National School Lunch Program, which provides free and reduced-price lunches, and the "Unclassified" category for race/ethnicity are not displayed. Visit http://nces.ed.gov/nationsreportcard/states/ for additional results and detailed information.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990–2007 Mathematics Assessments.